In the Application of:
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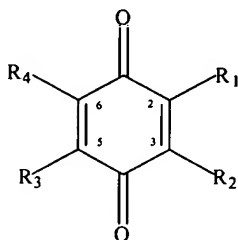Serial No. 10/003,465   Docket No. 43257

IN THE CLAIMS:

1. (Re-presented - formerly dependent claim # 15)   A method for controlling a population of target aquatic pest by applying an aquacidal compound to water infected with said aquatic pest, wherein said aquacidal compound ~~comprises at least one benzoquinone and~~ is applied in an amount that is effective to kill said population <u>and is a benzoquinone having the formula:</u>

<u>where: R$_1$ is hydrogen, methyl, hydroxy or methoxy group;</u>

<u>R$_2$ is hydrogen, hydroxy, methyl, methoxy or -NO$_2$ group;</u>

<u>R$_3$ is hydrogen, hydroxy, methyl or methoxy group; and</u>

<u>R$_4$ is hydrogen, methyl, methoxy, hydroxy, or -NO$_2$ group.</u>

2. (Original)   The method of claim 1, wherein said population of target aquatic pest is selected from the group consisting of viruses, protists, fungi, molds, plants, holoplanktonic organisms, meroplanktonic organisms, demersal organisms, benthic organisms, detached or floating biota, bacteria whether or not encysted, protozoans, algae, pyrrophyta, cryptophyta, chrysophyta, porifera, platyhelminthes, pseudocoelomates, annelid worms, zebra mollusks, bivalves, larval forms of copepods, ostracods, mysids, gammarids, larval forms of decapods, and larval teleost fish.

3. (Original)   The method of claim 1, wherein said population of target aquatic pest is selected from the group consisting of viruses, protists, holoplanktonic organisms, and meroplanktonic organisms.

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4. (Original)   The method of claim 1 wherein said population of target aquatic pest is selected from the group consisting of demersal organisms, benthic organisms, detached or floating biota, bacteria, encysted bacteria, and protozoans.

5. (Original)   The method of claim 1 wherein said population of target aquatic pest is selected from the group consisting of algae, pyrrophyta, cryptophyta, chrysophyta, porifera, platyhelminthes, pseudocoelomates, annelid worms, zebra mussels, bivalves, larval forms of copepods, ostracods, mysids, gammarids, larval forms of decapods, and larval teleost fish.

6. (Original)   The method of claim 1 wherein said population of target aquatic pest is selected from the group consisting of spiny water flea and bacteria whether or not encysted.

7. (Original)   A method according to claim 1 wherein said target aquatic pest is selected from the group consisting of bacteria whether or not encysted, protozoans, algae, dinoflagellates, dinoflagellate cysts, zebra mussels, and zebra mussel larvae.

8. (Original)   A method according to claim 1 wherein said target aquatic pest is selected from the group consisting of bacteria whether or not encysted, algae, dinoflagellates, dinoflagellate cysts, zebra mussels, and zebra mussel larvae.

9. (Original)   A method according to claim 1 wherein said target aquatic pest is a bacteria whether or not encysted.

10. (Original)   A method according to claim 9 wherein said bacteria is a *Vibrio* species.

11. (Original)   A method according to claim 1 wherein said target aquatic pest is a zebra mussel or zebra mussel larvae.

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12. (Original)   A method according to claim 1 wherein said target aquatic pest is a demersal organism.

13. (Original)   A method according to claim 1 wherein said target aquatic pest is a benthic organism.

14. (Original)   A method according to claim 1 wherein said target aquatic pest is a dinoflagellate cyst.

15. (Canceled)

16. (Currently amended)   The method of claim 1 +5, wherein said aquacidal compound is selected from the group consisting of 1,4-benzoquinone, 2,5-dihydroxy 3,6-dinitro p-benzoquinone, 2,6-dimethoxy benzoquinone, 3-hydroxy-2-methoxy-5-methyl-p-benzoquinone, 2-methylbenzo-quinone, tetrahydroxy-p-benzoquinone, 2,3-methoxy-5-methyl, 1-4-benzoquinone and mixtures thereof.

17. (Original)   The method of claim 1, wherein said aquacidal compound is 2,3-methoxy-5-methyl-1,4-benzoquinone.

18. (Original)   The method of claim 1 wherein said aquacidal compound is present in an amount of less than 1 wt%.

19. (Original)   The method of claim 1 wherein said aquacidal compound is present in an amount within the range of 100 ppb to 500 ppm.

20. (Original)   The method of claim 1 wherein said aquacidal compound is present in an amount within the range of 500 ppb to 300 ppm.

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21. (Original)   The method of claim 1 wherein said aquacidal compound is present in an amount within the range of 1 ppm to 200 ppm.

22. (Original)   The method of claim 1 wherein said population is exposed to said aquacidal compound for at least one hour.

23. (Original)   The method of claim 22 wherein said population is exposed to said aquacidal compound for 1-96 hours.

24. (Original)   The method of claim 23 wherein said population is exposed to said aquacidal compound for 2-48 hrs.

25. (Original)   The method of claim 1 wherein said population of target pest organisms are located in a ballast water reservoir.

26. (Original)   The method of claim 1 wherein said population is *Vibrio Cholera* or *Vibrio Fisheri*.

27. (Original)   A method for killing a target population of mollusk pests in an aqueous system hosting said population comprising the step of adding to said aqueous system an amount that is sufficient to kill said target population of an aquacidal compound selected from the group consisting of 1,4-benzoquinone, 2,5-dihydroxy 3,6-dinitro p-benzoquinone, 2,6-dimethoxy benzoquinone, 3-hydroxy-2-methoxy-5-methyl-p-benzoquinone, 2-methylbenzoquinone, tetrahydroxy-p-benzoquinone, 2,3-methoxy-5-methyl, 1-4-benzoquinone and mixtures thereof.

28. (Original)   The method of claim 27, wherein said mollusk pests are selected from the group consisting of mussels, clams and snails.

29. (Original)   The method of claim 27, wherein said mollusk pests are selected from the group consisting of zebra mussels and Asiatic clams.

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30. (Original)   The method of claim 27 wherein said pests are exposed to said aquacidal compound for a period of time sufficient to kill said pests.

31. (Original)   The method of claim 30 wherein said pests are exposed to said aquacidal compound for a period of time within the range of 1-96 hours.